Amendments to the Claims:

Please kindly amend the claims as follows. This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A peptide comprising the sequence ~~R_1-X_1-X_2-X_3-X_4-R_2~~ R_1-X_1-V-R-X_4-R_2 or partial or full retro-inverso sequences thereof, wherein X_1 is selected from the group consisting of N, Q, D and S; ~~X_2 is selected from the group consisting of V, I and L; X_3 is selected from the group consisting of R and K;~~ and X_4 is selected from the group consisting of [~~V, I,~~] L and F; R_1 is a hydrogen or a peptide of 1 to 6 amino acids, an acyl or an aryl group; and R_2 is a peptide of 1 to 3 amino acids, a hydroxide or an amide, provided that the peptide does not comprise the sequence FQGVLQNVRFVF (SEQ ID NO:6) or FRGCVRNLRLSR (SEQ ID NO:12) or DVRF (SEQ ID NO:54).

2. (Currently Amended) The peptide of claim 1 containing from about 4 amino acids to about 12 amino acids.

3. (Previously Presented) The peptide of claim 1 wherein R_1 is a peptide comprising the sequence selected from the group consisting of FQGVLQ (SEQ ID NO:13), FAGVLQ (SEQ ID NO:14), FQGVAQ (SEQ ID NO:15), FQGVLA (SEQ ID NO:16), and FQGVLN (SEQ ID NO:17).

4. (Currently Amended) The peptide of claim 1, wherein said peptide ~~comprising~~ comprises at least one sequence selected from the group consisting of ~~FQGVLQNLRFVF (SEQ ID NO:18), FQGVLQDVRFVF (SEQ ID NO:19),~~ FQGVLQQVRFVF (SEQ ID NO:20), FQGVLQSVRFVF (SEQ ID NO:21), acQGVLQNVRF (SEQ ID NO:22), ~~FQGVLQNVKFVF (SEQ ID NO:23),~~ FQGVLNNVRFVF (SEQ ID NO:24), AQGVLQNVRFVF (SEQ ID NO:25),

FAGVLQNVRFVF (SEQ ID NO:26), FQGVAQNVRFVF (SEQ ID NO:27), FQGVLQNVRFVA (SEQ ID NO:28), FQGVLANVRFVF (SEQ ID NO:29), FQGVLQNVRFV (SEQ ID NO:30), QGVLQNVRFVF (SEQ ID NO:31), and FQGVLQNVRF (SEQ ID NO:32).

5. (Currently Amended) The peptide of claim 1 wherein X_1-X_2-X_3-X_4 is selected from the group consisting of NVRF (SEQ ID NO:51), SVRF (SEQ ID NO:52), and QVRF (SEQ ID NO:53)~~, DVRF (SEQ ID NO:54) and NLRF (SEQ ID NO:55)~~.

6. (Cancel)

7. (Currently Amended) The peptide of ~~claim 6~~ claim 1 that comprises at least one D-amino acid.

8. (Original) A retro-inverso synthetic peptide comprising the amino acids sequence, from C-terminal (left) to N-terminal (right): ri- R'_1-X'_1-X'_2-X'_3-X'_4-R'_2, wherein ri denotes a retro-inverso peptide and all amino acids are D amino acids; X'_1 is selected from the group consisting of N, Q, D and S; X_2 is selected from the group consisting of V, I and L; X_3 is selected from the group consisting of R and K; and X_4 is selected from the group consisting of V, I, L and F; R'_1 is a hydrogen or a peptide of 1 to 6 amino acids, a hydroxide or an amide; and R'_2 is a peptide of 1 to 3 amino acids, an acyl or an aryl group.

9. (Currently Amended) The peptide of claim 8 containing from about 4 amino acids to about 12 amino acids.

10. (Currently Amended) ~~The~~ A peptide ~~of claim 6~~ comprising the sequence FQGVLQNVRFVF (SEQ ID NO:6) wherein every amino acid in said sequence is a D-amino acid.

11. (Currently Amended) A peptide-substrate combination comprising a substrate suitable for cell growth and a peptide according to claim 1 ~~of 4 to 12 amino acids attached to said substrate, said peptide comprising the sequence R_1-X_1-X_2-X_3-X_4-R_2, wherein X_1 is selected from the group consisting of N, Q, D and S; X_2 is selected from the group consisting of V, I and L; X_3 is selected from the group consisting of R and K; and X_4 is selected from the group consisting of V, I, L and F; R_1 is a hydrogen or a peptide of 1 to 6 amino acids, an acyl or an aryl group; and R_2 is a peptide of 1 to 3 amino acids, a hydroxide or an amide~~.

12. (Original) The substrate of claim 11 that is a cell culture substrate.

13. (Currently Amended) A pharmaceutical composition comprising a peptide according to claim 1 and a pharmaceutically acceptable carrier~~, said peptide comprising the sequence R_1-X_1-X_2-X_3-X_4-R_2, or partial or full retro-inverso sequences thereof, wherein X_1 is selected from the group consisting of N, Q, D and S; X_2 is selected from the group consisting of V, I and L; X_3 is selected from the group consisting of R and K; and X_4 is selected from the group consisting of V, I, L and F; R_1 is a hydrogen or a peptide of 1 to 6 amino acids, an acyl or an aryl group; and R_2 is a peptide of 1 to 3 amino acids, a hydroxide or an amide~~.

14. (Currently Amended) A sterile composition comprising a peptide according to claim 1 and a sterile aqueous solution~~, said peptide comprising the sequence R_1-X_1-X_2-X_3-X_4-R_2, or partial or full retro-inverso sequences thereof, wherein X_1 is selected from the group consisting of N, Q, D and S; X_2 is selected from the group consisting of V, I and L; X_3 is selected from the group consisting of R and K; and X_4 is selected from the group consisting of V, I, L and F; R_1 is a hydrogen or a peptide of 1 to 6 amino acids, an acyl or an aryl group; and R_2 is a peptide of 1 to 3 amino acids, a hydroxide or an amide~~.

15. (Currently Amended) A peptide conjugate comprising a peptide according to claim 1 and a water soluble polymer~~, said peptide comprising the sequence R_1-X_1-X_2-X_3-X_4-~~

~~R_2, or partial or full retro-inverso sequences thereof, wherein X_1 is selected from the group consisting of N, Q, D and S; X_2 is selected from the group consisting of V, I and L; X_3 is selected from the group consisting of R and K; and X_4 is selected from the group consisting of V, I, L and F; R_1 is a hydrogen or a peptide of 1 to 6 amino acids, an acyl or an aryl group; and R_2 is a peptide of 1 to 3 amino acids, a hydroxide or an amide; and a water soluble polymer~~.

16. (Original) The peptide conjugate of claim 15 wherein the water soluble polymer comprises at least one member selected from the group consisting of polysucrose and dextran.

17. (Original) The peptide-substrate combination of claim 11 wherein the substrate comprises metal, glass, glass fiber, ceramic, polystyrene, polyethylene, cellulose, nylon, polycarbonate, polyurethane, polyester, tetrafluoroethylene polymer , or silicone rubber.

18. (Original) A vascular graft comprising the peptide-substrate combination of claim 11.

19. (Original) An artificial blood vessel comprising the peptide-substrate combination of claim 11.

20. (Currently Amended) A method of inhibiting adhesion of a cell expressing $\alpha 3\beta 1$ integrin to an extracellular matrix comprising contacting said cell with a peptide <u>according to claim 1</u> ~~comprising the sequence R_1-X_1-X_2-X_3-X_4-R_2, or partial or full retro-inverso sequences thereof; wherein X_1 is selected from the group consisting of N, Q, D and S; X_2 is selected from the group consisting of V, I and L; X_3 is selected from the group consisting of R and K; and X_4 is selected from the group consisting of V, I, L and F; R_1 is a hydrogen or a peptide of 1 to 6 amino acids, an acyl or an aryl group; and R_2 is a peptide of 1 to 3 amino acids, a hydroxide or an amide~~.

21. (Original) The method of claim 20 wherein the extracellular matrix comprises TSP1 or laminins.

22. (Original) The method of claim 20 wherein said contacting takes place *in vitro*.

23. (Original) The method of claim 20 wherein said cell comprises an epithelial or an endothelial cell.

24. (Original) The method of claim 20 wherein said cell is a tumor cell.

25. (Original) The method of claim 20 wherein said cell is a breast carcinoma cell or a small cell lung carcinoma.

26. (Currently Amended) A method of inhibiting $\alpha 3\beta 1$ integrin-mediated cell motility, comprising contacting a cell with a peptide according to claim 1 ~~comprising the sequence R_1-X_1-X_2-X_3-X_4-R_2, or partial or full retro-inverso sequences thereof; wherein X_1 is selected from the group consisting of N, Q, D and S; X_2 is selected from the group consisting of V, I and L; X_3 is selected from the group consisting of R and K; and X_4 is selected from the group consisting of V, I, L and F; R_1 is a hydrogen or a peptide of 1 to 6 amino acids, an acyl or an aryl group; and R_2 is a peptide of 1 to 3 amino acids, a hydroxide or an amide~~.

27. (Original) The method of claim 26 wherein said contacting occurs *in vitro*.

28. (Original) The method of claim 26 wherein the cell is an epithelial cell, an endothelial cell or a malignant cell.

29. (Currently Amended) A method of inhibiting proliferation of endothelial cells, comprising contacting said cells with a peptide according to claim 1 ~~comprising the sequence R_1-X_1-X_2-X_3-X_4-R_2, or partial or full retro-inverso sequences thereof; wherein X_1 is selected from the group consisting of N, Q, D and S; X_2 is selected from the group consisting of V, I and L; X_3 is selected from the group consisting of R and K; and X_4 is selected from the group consisting of V, I, L and F; R_1 is a hydrogen or a peptide of 1 to 6 amino acids, an acyl or an aryl group; and R_2 is a peptide of 1 to 3 amino acids, a hydroxide or an amide~~.

30. (Currently Amended) A method of inhibiting proliferation of small cell lung carcinoma, comprising contacting said cell with a peptide according to claim 2 ~~of 4 to 12 amino acids comprising the sequence R_1-X_1-X_2-X_3-X_4-R_2, or partial or full retro-inverso sequences thereof; wherein X_1 is selected from the group consisting of N, Q, D and S; X_2 is selected from the group consisting of V, I and L; X_3 is selected from the group consisting of R and K; and X_4 is selected from the group consisting of V, I, L and F; R_1 is a hydrogen or a peptide of 1 to 6 amino acids, an acyl or an aryl group; and R_2 is a peptide of 1 to 3 amino acids, a hydroxide or an amide~~.

31. (Original) A method of promoting the proliferation of an endothelial cell, comprising contacting said cell with the peptide-substrate combination of claim 11 under conditions supportive of cell division.

32. (Original) The method of claim 31 wherein said contacting takes place *in vitro*.

33. (Original) The method of claim 31 wherein the endothelial cell is a human cell.

34. (Original) The method of claim 31 wherein said contacting takes place in an animal.

35. (Original) The method of claim 31 wherein said contacting takes place in an animal. The method of claim 34 wherein said contacting occurs in the wall of a blood vessel.

36. (Original) The method of claim 34 wherein the animal is a rat, mouse, human or a non-human primate.

37. (Currently Amended) A method of treating an angiogenesis-mediated disease in an animal comprising administering to the animal an effective amount of a peptide according to claim 1 ~~comprising the sequence R_1-X_1-X_2-X_3-X_4-R_2, or partial or full retro-inverso sequences thereof; wherein X_1 is selected from the group consisting of N, Q, D and S; X_2 is selected from the group consisting of V, I and L; X_3 is selected from the group consisting of R and K; and X_4 is selected from the group consisting of V, I, L and F; R_1 is a hydrogen or a peptide of 1 to 6 amino acids, an acyl or an aryl group; and R_2 is a peptide of 1 to 3 amino acids, a hydroxide or an amide~~.

38. (Original) The method of claim 37 wherein the angiogenesis-mediated disease is diabetic retinopathy, retinopathy of prematurity, rheumatoid arthritis, macular degeneration, atherosclerosis plaque formation, or a cancer.

39. (Original) The method of claim 37 wherein the animal is a rat, mouse, human or nonhuman primate.

40. (Original) The method of claim 37 wherein the disease is cancer.

41. (Original) The method of claim 40 wherein the cancer is characterized by the formation of a solid tumor.

42. (Original) The method of claim 41 wherein said solid tumor tissue is a carcinoma.

43. (Original) The method of claim 37 wherein the administration is intravenous, transdermal, intramuscular, topical, subcutaneous, intracavity, or peristaltic administration.

44. (Currently Amended) A method of inducing solid tumor tissue regression in a patient comprising administering to said patient a composition sufficient to inhibit neovascularization of said solid tumor tissue, said composition comprising a peptide according to claim 1 ~~said peptide comprising the sequence R_1-X_1-X_2-X_3-X_4-R_2, or a partial or full retro-inverso sequences thereof; wherein X_1 is selected from the group consisting of N, Q, D and S; X_2 is selected from the group consisting of V, I and L; X_3 is selected from the group consisting of R and K; and X_4 is selected from the group consisting of V, I, L and F; R_1 is a hydrogen or a peptide of 1 to 6 amino acids, an acyl or an aryl group; and R_2 is a peptide of 1 to 3 amino acids, a hydroxide or an amide~~.

45. (Original) The method of claim 44 wherein said administering is conducted in conjunction with chemotherapy or radiotherapy.

46. (New) A peptide comprising the sequence R_1-D-V-R-F-R_2, or partial or full retro-inverso sequences thereof, wherein R_1 is a hydrogen or a peptide of 1 to 6 amino acids, an acyl or an aryl group; and R_2 is a peptide of 2 or 3 amino acids, a hydroxide or an amide.

47. (New) The peptide according to claim 46 comprising the sequence FQGVLQDVRFVF (SEQ ID NO:19).